SANTA CRUZ BIOTECHNOLOGY, INC.

RXRβ (MOK13-17): sc-56869

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Two families of retinoid receptors, RARs and RXRs, have been identified. Retinoic acid receptors (RARs) include RARα, RARβ and RARγ, each of which have a high affinity for all *trans*-retinoic acids and belong to the same class of nuclear transcription factors as thyroid hormone receptors, vitamin D_3 receptor and ecdysone receptor. The ligand-binding domains of the RARs are highly conserved and RAR isoforms are expressed in distinct patterns throughout development and in the mature organism. Members of the retinoid X receptor (RXR) family, RXRα, RXRβ and RXRγ, are activated by 9-*cis*-RA, a stereo- and photo-isomer of all *trans*-RA that is expressed *in vivo* in both liver and kidney and may represent a widely used hormone. As is true for the RAR subfamily, the RXR receptors are closely related to each other both in their DNA-binding and ligand-binding domains and are encoded by separate genes at distinct chromosomal loci.

CHROMOSOMAL LOCATION

Genetic locus: RXRB (human) mapping to 6p21.32; Rxrb (mouse) mapping to 17 B1.

SOURCE

RXRβ (MOK13-17) is a mouse monoclonal antibody raised against full length recombinant RXRβ of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

RXRβ (MOK13-17) is recommended for detection of $RXR\beta_1$ and $RXR\beta_2$ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with either RXRα or RXRγ.

Suitable for use as control antibody for RXRβ siRNA (h): sc-36445, RXRβ siRNA (m): sc-36446, RXRβ shRNA Plasmid (h): sc-36445-SH, RXRβ shRNA Plasmid (m): sc-36446-SH, RXRβ shRNA (h) Lentiviral Particles: sc-36445-V and RXRβ shRNA (m) Lentiviral Particles: sc-36446-V.

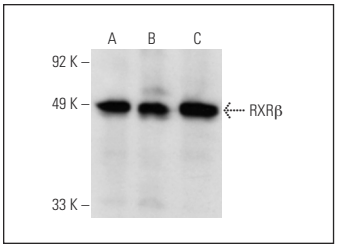
Molecular Weight of RXRβ: 50-54 kDa.

Positive Controls: A-431 nuclear extract: sc-2122, NIH/3T3 nuclear extract: sc-2138 or SK-BR-3 nuclear extract: sc-2134.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



RXRβ (MOK13-17): sc-56869. Western blot analysis of RXRβ expression in A-431 (**A**), NIH/3T3 (**B**) and SK-BR-3 (**C**) nuclear extracts.

SELECT PRODUCT CITATIONS

1. Wnuk, A., et al. 2016. The crucial involvement of retinoid X receptors in DDE neurotoxicity. Neurotox. Res. 29: 155-172.
2. Wnuk, A., et al. 2018. Benzophenone-3 impairs autophagy, alters epigenetic status, and disrupts retinoid X receptor signaling in apoptotic neuronal cells. Mol. Neurobiol. 55: 5059-5074.
3. Wnuk, A., et al. 2019. Prenatal exposure to benzophenone-3 impairs autophagy, disrupts RXRs/PPARγ signaling, and alters epigenetic and post-translational statuses in brain neurons. Mol. Neurobiol. 56: 4820-4837.
4. Yang, Z., et al. 2019. A pilot study on polycystic ovarian syndrome caused by neonatal exposure to tributyltin and bisphenol A in rats. Chemosphere 231: 151-160.
5. Nieto, L., et al. 2019. Crosstalk of BMP-4 and RA signaling pathways on Pomc gene regulation in corticotrophs. J. Mol. Endocrinol. 63: 161-174.
6. Guo, J., et al. 2020. *In utero* exposure to phenanthrene induces hepatic steatosis in F1 adult female mice. Chemosphere 258: 127360.

RESEARCH USE

For research use only, not for use in diagnostic procedures.